

**APPROPRIATIONS REQUEST FORM
OREGON HOUSE DELEGATION
FISCAL YEAR 2010**

DEADLINE FOR SUBMISSION: FEBRUARY 13, 2009

PLEASE NOTE: As required by the House Appropriations Committee, all requests will be made public on the requesting Member's website.

1. Project Title: Sustainable Careers for Green Economic Recovery (Portland Community College FY 2010 Appropriations Request)

2. Organization Name and address: Portland Community College, Sylvania Campus, 12000 SW 49th Avenue, Portland, OR 97219

3. Primary Contact name, phone number, mobile phone number, fax number and email:

4. Project Location Address (if different from Organization): Portland Community College campuses, including Sylvania Campus, 12000 SW 49th Avenue, Portland, OR 97219; Rock Creek Campus, 17705 NW Springville Road, Portland, OR 97229; Cascade Campus, 705 N. Killingsworth Street, Portland, OR 97217; and Southeast Center, 2305 SE 82nd and Division, Portland, OR 97216.

5. Please describe the requesting organization's main activities, and whether it is a public, private non-profit, or private for-profit entity: Portland Community College (PCC) is the largest institution of higher learning in the state, serving more than 1,373,758 college-age residents in a five-county, 1,500-square mile area in northwest Oregon. During the 2007-2008 school year, over 86,164 students attended PCC. PCC provides high-quality affordable education and career training for a widely diverse student body, including a high percentage of students of color and first-generation college students. Working in close partnership with local industry leaders, PCC's career training and certificate programs are designed to effectively assist populations that have historically been underrepresented in college and skilled careers get access to the education and training they need to secure high-quality, family wage jobs. PCC is a public entity.

6. Briefly describe the activity or project for which funding is requested (please keep to 500 words or less.)

Oregon has made support for sustainable industries a cornerstone of its economic development strategy. However, Oregon's ability to attract new sustainable industry partners and grow existing businesses is limited by its supply of trained workers in these fields. Even as state unemployment tops 9%, Oregon sustainable industries are projecting labor shortages for green-collar workers. To meet this need, PCC's proposed Sustainable Careers program will provide Oregon residents with intensive job training in renewable energy, green construction, maintenance and design, and alternative fuel automotive technologies, specifically designed to create sustainable family wage jobs for Oregon residents, while providing a skilled labor force that will help attract and retain sustainable industries in Oregon.

PCC seeks approximately \$1.4 million in federal funding to: 1) increase the number of trained renewable energy technicians, building commissioners, green building technicians and designers, and alternative fuel service technicians in Oregon; 2) create and implement a Green Jobs Training program for high school students; and 3) develop new career training options at PCC for emerging sustainable industry needs. To keep the proposed program focused on job creation, PCC will work closely with sustainable industry partners and leaders in the design and delivery of the programs to ensure they meet business needs. The requested funding would be used to develop curriculum, offer classes, and purchase specialized lab equipment for hands-on training. By leveraging PCC's unique combination of training expertise, business connections, commitment to sustainability, and access to diverse student populations, the proposed Sustainable Careers project will create living wage Oregon jobs in green technology industries, while increasing the supply of trained green-collar workers to support Oregon's economic recovery.

With federal support, PCC will make the following investments:

- Expand the renewable energy training option within PCC's Electronic Engineering Technology Program and prepare 30 new students per year for family-wage jobs as renewable energy technicians in solar, hydro, wind, and fuel cell companies.
- Add a new sustainable building commissioner training option to PCC's existing Facilities Maintenance Technology Program and train 100 workers each year in energy-efficient, sustainable construction and engineering fields as building commissioners.
- Add a green roof/green wall training option to PCC's Building Construction and Landscape Technology programs and train 60 new and current workers per year in green construction and maintenance.
- Expand the sustainable building certificate option within PCC's Architectural Design and Drafting program and train 85 students each year in the design of sustainable buildings that minimize environmental impact and maximize occupants' health and well-being.
- Expand the alternative fuels training option within PCC's automotive repair technician program and train 60 students each year in hybrid and plug-in vehicle technology.
- Implement a new Green Jobs Training program for Oregon high school students, training 30 students each year in Renewable Energy and Solar Voltaic Manufacturing within PCC's existing Electronic Engineering Technology and Microelectronics Technology Programs.
- Develop additional green technology training and degree options in emerging fields, including environmental monitoring and resource management; green building inspection; and energy-efficient retrofits of existing buildings.

7. Has this project received federal appropriations funding in past fiscal years? The Sustainable Careers for Green Economic Recovery Project is a new initiative, and has therefore not received federal appropriations funding in past fiscal years.

7a. If yes, please provide fiscal year, Department, Account, and funding amount of any previous funding. n/a

8. Federal agency and account from which funds are requested. (Please be specific—e.g. Department of Housing and Urban Development, Economic Development Initiatives account): Potential agencies and accounts include: Department of Energy; Department of Education, FIPSE; Small Business Administration; Department of Housing and Urban Development, EDI; Department of Labor, ETA Demonstrations and Projects.

9. What is the purpose of the project? Why is it a valuable use of taxpayer funds? How will the project support efforts to improve the economy and create jobs in Oregon?

PCC's Sustainable Careers program will meet the demand for trained workers to support growth in Oregon's sustainable industries, while also creating and supporting permanent "family-wage" green-collar jobs for Oregon residents. These training programs will be designed with the direct input of Oregon businesses, helping transform sustainable industry training programs at PCC into long-term sustainable industry careers for Oregon residents. PCC serves a five-county area including Washington County, Multnomah County, Columbia County, Yamhill County and Clackamas County, which will allow the Sustainable Careers program to directly benefit Oregon residents and businesses in several Congressional Districts, including the 1st District, the 3rd District, and the 5th District. Three of the job training programs—including Renewable Energy, Sustainable Building, and Alternative Fuels—are based in the 5th District.

Even with unemployment rates topping 9% and a rapidly deepening recession, sustainable industries are remarkably forecasting labor shortages for skilled "green-collar" positions in Oregon. On February 10, 2009, the headline of the Oregonian Metro section, "Green Jobs Abundant; Training Is Scarce", summed up the problem, and suggested funding green career training programs as the solution. A recently published October 2008 report, partially funded by the Lemelson Foundation and the Energy Foundation, indicates that between 41,000 and 63,000 jobs will be created in Oregon and Washington in just five clean-tech sectors alone (Ron Pernick, Clint Wilder, and Dexter Gauntlett, *Carbon-Free Prosperity: How the Northwest Can Create Green Jobs, Deliver Energy Security, and Thrive in the Global Clean-Tech Marketplace*, October 2008). As Oregon and the federal government move forward with substantial economic stimulus packages that invest heavily in the development of green energy technologies and the construction and renovation of energy-efficient infrastructure, it is critical to ensure there is a pipeline of trained Oregon technicians to install and maintain these projects.

Given that these high-demand, well-paying "green collar" jobs generally require more education than a high school diploma, but less than a four year degree, Portland Community College is uniquely positioned to be the primary provider of training in these emerging fields. PCC has already developed significant expertise in supporting sustainable industries in Oregon, including receiving a 2008 National Science Foundation grant supporting the Sustainability Training for Technical Educators (STTE) project. Additionally, as the most diverse college or university in Oregon, with a high percentage of students of color and first-generation college students, PCC can also effectively ensure that populations that have historically been underrepresented both in

college and these high-paying career fields have access to the specialized training necessary for these jobs. Finally, the Sustainable Careers Project would benefit from PCC's wide network of industry partners. PCC would work closely with both existing and new industry partners in the design and delivery of the programs to ensure they meet business needs, with a goal of helping to create good jobs for Oregon residents, as well as supporting Oregon's role as the North American leader in sustainable industries.

PCC, as a Community College, offers a cost-effective way to deliver this vital job training. Dollar for dollar, community colleges offer Oregon residents the most affordable way to gain marketable job skills and education, as well as providing employers with affordable skills training programs for current employees. PCC seeks approximately \$1.4 million in federal funding for the Sustainable Careers initiative, with programs designed to help to address specific Oregon labor shortages, as well as filling the sustainable industry "education gap" for post-secondary students in Oregon. As detailed in the budget, the requested funding would be used to develop curriculum, offer classes, and purchase specialized lab equipment for hands-on training. If funded, PCC will:

1) Expand the renewable energy training option within PCC's existing Electronic Engineering Technology Program and prepare 30 new students per year for well-paying family wage jobs as renewable energy technicians. Renewable energy technicians design, install and maintain solar, wind, hydro and fuel-cell energy systems, and perform regular preventative maintenance and repair activities on wind turbine generators, solar power installations, and hydro power systems. Business energy tax credits and targeted recruitment efforts have led to the addition of close to 60 new companies in the renewable energy sector. Oregon's strong commitment to renewable energy, including the existing Renewable Portfolio Standard (which mandates that large utilities will supply 25% of electricity from new renewable sources by 2025, including wind, solar, wave, tidal, geothermal, new hydro, biomass, and efficiency upgrades) and the proposed Renewable Energy Payment (REP) program, will drive increased industry and consumer demand for renewable energy technicians. Oregon currently only has two approved Associate degree programs in the renewable energy field, and the growing industry demand for a skilled workforce with two-year degrees already significantly outstrips existing capacity. Many of these technicians' base pay is around \$50,000 per year plus overtime.

2) Add a new building commissioner training option to PCC's existing Facilities Maintenance Technology Program and train 100 current workers each year in construction and engineering fields as building commissioners. Building commissioners are highly trained technicians who ensure that new energy-efficient heating, ventilating, and air conditioning systems are designed and installed according to a building's operational needs. Despite the need for skilled building commissioners, there are no such training programs in Oregon – the closest building commissioner training is located in Wisconsin. Moreover, as public demand for "green" buildings has intensified, a significant gap has emerged between the skills of current building commissioners and the specialized new skills needed to assess and operate new energy-efficient systems and equipment. The prevalence and popularity of LEED-certified projects and green retro-fits in Portland will drive continuing job creation in this field. Building commissioners typically earn \$47,000 per year.

3) Add a green roof and green wall training option to PCC's Building Construction and Landscape Technology programs and train 60 new and current workers per year in green construction and maintenance. In addition to roof longevity, green roofs and walls offer a variety of additional benefits, including decreased heating and cooling costs within the building, reduced stormwater runoff, reduced urban heat islands, and added green space. Specialized skills are required to construct and maintain these roofs and walls, and these jobs require knowledge in both construction and landscaping. Yearly salaries in construction range up to \$80,000 depending on certificates, licenses and experience, and specialized expertise in green roof/wall construction commands higher compensation, compared to technicians who do not have these skills.

4) Expand the sustainable building certificate option within PCC's Architectural Design and Drafting program and train 85 students each year in the design of buildings that minimize environmental impact and maximize the health and well-being of occupants. New state and city sustainability initiatives require training in building design that emphasizes energy efficiency, building science, sustainable building practices and incentive programs, as well as green retro-fits and updated building codes. PCC offers the only Associate degree in residential design in the Pacific Northwest, preparing students for design and drafting jobs with residential design, engineering, architectural, and construction firms. Driving both public demand and job creation, Portland is home to world-class green design firms, including Gerding Edlen, Brightworks, and SERA among many others. Portland is consistently rated in the top three cities nationally in the number of LEED-certified buildings. Other Oregon achievements include the nation's first LEED Gold-certified hospital, based in Newberg. Salary for residential designers with knowledge of sustainability principles starts at approximately \$36,000 per year.

5) Expand the alternative fuels training option within PCC's automotive repair technician program and train 60 students each year in hybrid and plug-in vehicle technology. The benefits that hybrid and plug-in cars yield in reduced fuel emissions and oil consumption are well-known. Oregon is a leader in alternative biofuel vehicles, including the greenest state car fleet in the nation, and the highest per capita ownership of hybrid vehicles in the nation. As the demand for alternative fuel vehicles increases and as policy changes support the further enhancement and adoption of these technologies, current and entry-level auto technicians must be trained on the diagnosis and repair of these vehicles. Policy mandates which will help drive job creation include strong statewide Renewable Fuel Standards as well as Portland's requirement that all fuel sold in the city include a biofuel component. Additionally, to encourage the electric and hybrid car industry, the state plans to build charging stations throughout Portland. The average salary for an automotive technician is \$37,000 per year.

6) Implement a new Green Jobs Training Program for Oregon high school students, training 30 students each year in Renewable Energy and Solar Voltaic Manufacturing within PCC's existing Electronic Engineering Technology and Microelectronics Technology Programs. To meet Oregon's long-term need for skilled renewable energy technicians, it is vital to immediately reach out to existing high school students with green-collar job career options. PCC proposes to open up the first year of both the Renewable Energy Training track and the Solar Voltaic Manufacturing track to allow 30 district high school students in career technical education programs to enroll in these dual credit programs, allowing them to earn green collar job skills and college credit while completing their high school education. Courses will be offered through a combination of distance

learning and faculty-supervised student use of PCC lab facilities and equipment for wind and solar simulation provided at PCC's SE Center location. In addition to providing job skills and college credit, this program will be designed to make high school students aware of job opportunities in sustainable industries.

7) Develop additional green technology training and degree options in a number of emerging fields, including environmental monitoring and management; green building inspection; and sustainable energy and resource management. Sustainable industries are forecasted to be a major economic growth center all across Oregon. The requested funding in this category will help PCC develop instructor expertise in additional areas in response to industry and job market needs; collect industry, employee, and government input about future industry needs; begin to create an innovative career-focused curriculum for these fields; and research appropriate equipment for specialized green job training programs.

Sustainable Oregon industries need a skilled workforce of green-collar workers; Oregon residents in a difficult economy need long-term sustainable jobs that pay a living wage. By providing job training in the critical areas of alternative energy, green construction, maintenance, and design, and alternative fuel automotive technologies, PCC's Sustainable Careers program will create sustainable jobs that pay a family wage for Oregon residents, while providing a skilled labor force that will help attract and retain sustainable industries in Oregon.

10. Have you requested funding for this project from other Members of Congress? If so, who?

In an effort to fund this important green-collar job creation project which directly benefits Oregon residents and businesses in several Congressional districts, PCC will submit the identical federal appropriations request to Congressman David Wu (1st District), Congressman Earl Blumenauer (3th District), Senator Ron Wyden and Senator Jeff Merkley.

11. Funding Details:

a. Total project cost (all funding sources and all years): \$2,033,493

b. Amount being requested for this project in Fiscal Year 2010: \$1,413,493

c. What other funding sources (local, regional, state) are contributing to this project or activity? (Please provide specific dollar amount or percentage.) PCC has a strong base of voter support across our five county service region, as demonstrated in the recent passage of PCC Bond 26-95. As a part of PCC's commitment to sustainable job training programs, if the Sustainable Careers Program is funded through this federal appropriation request, PCC will commit \$620,000 of the PCC Bond 26-95 funds to support the additional unfunded costs of this project.

d. Do you expect to request federal funding in future years for this project? PCC does not anticipate a future request for federal funding for this project.

e. Breakdown/budget of the amount you are requesting for this project in FY 2010. (e.g. salary \$40,000; computer \$3,000):

Project Component	Equipment/	Personnel	Faculty/Curriculum	TOTAL
-------------------	------------	-----------	--------------------	-------

	Supplies		Development	
Renewable Energy Training	355,000	15,500	5,400	375,900
Building Commissioner Training	2,932	77,068	0	\$80,000
Green Roof/Wall Training	292,000	46,000	6,500	344,500
Sustainable Building Certificate	5,000	88,093	0	93,093
Alternative Fuels Training	155,000	0	45,000	200,000
Green Jobs Training for High School Students	45,000	75,000	0	120,000
Emerging Fields	0	0	200,000	200,000
Total	854,932	301,661	256,900	\$1,413,493

f. Please list public/ private organizations that have supported/endorsed this project: Public and private organizations that have supplied support letters for this project include:

Gerding Edlen Development (Dennis Wilde, Partner)	Vestas (Shawn Melander, Vice President, Business Academy)
SERA (Clark Brockman, Director of Sustainability Resources; Board Chair, Directors of the Cascadia Region Green Building Council)	Washington County Building Services Department (Dan Stricker, Supervisor)
Association of Women in Automotive (June Boone, President)	City of Beaverton Building Department (Brad Roast, Building Official)
Living Spaces (Beth Meredith and Eric Storm, Owners)	Beaverton Nissan (Steve Becker, Service Manager)
Landscape Oregon (Matt Hammack)	Hawthorne Auto Clinic (Jim Houser)
Teufel Landscape (Rick Christensen, Division Manager)	Ecoroofs Everywhere, LLC (Greg Haines, Principal)
Dennis' Seven Dees Landscaping (Nathan Dirksen)	Suzanne Zuniga Architect, LLC (Suzanne Zuniga, Owner)
Renewal Associates (R. Peter Wilcox, President)	Portland Energy Conservation Inc. (Phil Welker, Executive Director)
Earth Advantage, Inc. (Katy Schnepf)	Peter's Auto Works (Lewis Hess, Owner)

g. Is this project scalable? (i.e. if partial funding is awarded, will the organization be able to use the funds in FY 2010?): While the Sustainable Careers project would be most effective at the full funding level requested, individual proposed job training programs are scalable if partial funding is received.